

IN THE CLAIMS

Please amend the claims to read as follows:

Listing of Claims

1. (Currently Amended) A process of automatic control of the thrust of at least one engine ~~(2)~~ of an aircraft during a phase of horizontal flight at stabilized speed, according to which process the thrust of the engine ~~(2)~~ is controlled by applying a control value thereto which corresponds to the value of a predetermined control parameter representative of the rating of said engine ~~(2)~~, and according to which the process the following set of steps is carried out automatically and repeatedly:

a) an actual speed corresponding to the actual value of the speed of the aircraft is measured;

b) a preset reference speed corresponding to the speed of the aircraft, representative of the a control value obtained from the a previous set iteration of steps a) through f), is determined;

c) a first difference between said actual speed and said preset speed is calculated;

d) an intermediate term dependent on said first difference is determined for said control parameter, said intermediate term making it possible to obtain a corrector term;

e) ~~the~~ a sum is computed of said corrector term and of an equilibrium term which produces an equilibrium rating of the engine (2) in the absence of disturbances so as to obtain said control value; and

f) the control value thus obtained is applied to said engine,

wherein in step d) includes:

- calculating a second difference between said intermediate term of the present set of steps and ~~the~~ a corrector term selected in of the previous set iteration of steps a) through f) ~~is calculated~~;

- comparing this second difference ~~is compared~~ with a predetermined threshold value; and

- ~~one selects~~ selecting one of the following as corrector term for the present set of steps, that is used in particular in step e):

. said intermediate term of the present set of steps, if said second difference is greater than said threshold value; and

. said corrector term of the previous set of steps, if said second difference is less than or equal to said threshold value.

2. (Original) The process as claimed in claim 1, wherein said selected corrector term is filtered before using it in step e).

3. (Currently Amended) The process as claimed in claim 1, wherein said predetermined control parameter is the speed of rotation of the engine (2).

4. (Currently Amended) The process as claimed in claim 3, wherein said threshold value is equal to 0.5% of the preset value of the speed of rotation of the engine (2).

5. (Currently Amended) The process as claimed in claim 3, wherein in step d), said intermediate term is determined by computing the sum:

- of a first term which is proportional to said first difference; and
- of a second term which:

. corresponds to the integration of said first difference, if said first difference is greater than a predetermined value and if said actual speed does not diverge substantially from said preset speed; and

. is equal to zero, if at least one of the above conditions is not satisfied.

6. (Currently Amended) The process as claimed in claim 1, wherein said predetermined control parameter is the engine pressure ratio of said engine (2).

Claim 7 (Cancelled).

8. (Currently Amended) The method as claimed in claim 7 10, wherein said predetermined conditions comprise at least the following conditions:

- the actual speed is stabilized, being to within a predetermined value, equal to the preset speed;
- the conditions of calculation of said equilibrium term are valid;
- an autothrust function of the aircraft is engaged in speed holding mode; and

- an automatic pilot of the aircraft is active in altitude holding mode.

9. (Currently Amended) A device for controlling the thrust of at least one engine (2) of an aircraft during a phase of horizontal flight at stabilized speed, said device (1) comprising:

- means (15) for measuring an actual speed corresponding to the actual value of the speed of the aircraft;

- means (14) for determining a preset speed corresponding to the aircraft's speed representative of a control value;

- means (13) for calculating a first difference between said actual speed and said preset speed;

- means (16, 17, 18, 19, 20, 21, 22, 23) for determining, for a control parameter, an intermediate term dependent on said first difference, said intermediate term making it possible to obtain a corrector term;

- means (10) for computing the a sum of said corrector term and of an equilibrium term which produces an equilibrium rating of the engine (2) in the absence of disturbances so as to obtain a the control value; and

- means (4) for applying the control value thus obtained to said engine (2),

which device moreover comprises:

- means ~~(25)~~ for calculating a second difference between said intermediate term and a previously recorded corrector term;
- means ~~(26)~~ for comparing this second difference with a predetermined threshold value;
- means ~~(27)~~ for selecting as corrector term:
 - . said intermediate term, if said second difference is greater than said threshold value; and
 - . said previously recorded corrector term, if said second difference is less than or equal to said threshold value; and
- means ~~(29)~~ for recording the selected corrector term.

10. (New) A process of automatic control of the thrust of at least one engine of an aircraft during a phase of horizontal flight at stabilized speed, according to which process the thrust of the engine is controlled by applying a control value thereto which corresponds to the value of a predetermined control parameter representative of the rating of said engine, and according to the process the following set of steps is carried out automatically and repeatedly:

- a) an actual speed corresponding to the actual value of the speed of the aircraft is measured;

b) a preset reference speed corresponding to the speed of the aircraft, representative of a control value obtained from a previous iteration of steps a) through f), is determined;

c) a first difference between said actual speed and said preset speed is calculated;

d) an intermediate term dependent on said first difference is determined for said control parameter, said intermediate term making it possible to obtain a corrector term;

e) a sum is computed of said corrector term and of an equilibrium term which produces an equilibrium rating of the engine in the absence of disturbances so as to obtain said control value;

f) the control value thus obtained is applied to said engine,

wherein step d) includes:

calculating a second difference between said intermediate term of the present set of steps and a corrector term selected in the previous iteration of steps a) through f);

comparing this second difference with a predetermined threshold value; and

selecting one of the following as corrector term for the present set of steps, that is used in particular in step e):

said intermediate term of the present set of steps, if
said second difference is greater than said threshold value;
and

said corrector term of the previous set of steps, if
said second difference is less than or equal to said
threshold value; and

g) automatically switching from a first control process to
the control process defined by steps a) through f) when a
predetermined condition is satisfied, wherein:

the first control process is a process of controlling the
engine thrust that takes into account results of the first
control process under normal operation, and

the control process of steps a) through f) takes into
account the results of steps a) through f).